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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,102	12/22/2005	Franz Amtmann	AT03 0035 US1	8092

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EXAMINER	
LU, ZHIYU	

ART UNIT	PAPER NUMBER
2618	

NOTIFICATION DATE	DELIVERY MODE
08/10/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No.	Applicant(s)	
	10/562,102	AMTMANN ET AL.	
	Examiner	Art Unit	
	ZHIYU LU	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 June 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) *13-16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-12 in the reply filed on 06/19/2009 is acknowledged.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roz (US6462647) in view of Arakawa et al. (US7283810).

Regarding claim 1, Roz teaches a data carrier for contactless communication with a base station by means of an electromagnetic field (HF) generated by the base station (4), having

an antenna coil (32 of Fig. 5) connected to a first coil terminal (360 of Fig. 5) and to a second coil terminal (361 of Fig. 5), in which antenna coil an antenna signal (34 of Fig. 5) can be induced in operation by the electromagnetic field, and having

modulation means (column 4 lines 18-25) for modulating the electromagnetic field, during successive load periods (TB) and off-load periods (TE), with transmission data (UDD, KUDD) to be communicated to the base station, the electromagnetic field (HF) being load-modulated during the load periods (TB) by modifying the value of the impedance of a

modulation load that is connected at least indirectly to the first coil terminal and the second coil terminal (basically operation of modulating signal, column 2 lines 11-25), and having

detection means for detecting an item of energy information (EI, IRI) that characterizes the energy content of the antenna signal (ASD) (column 4 lines 26-44, detect energy for charging), and having

comparator means for comparing the item of energy information (EI, IRI) detected with a preset item of energy information and for emitting an item of comparison information (VI) (column 4 lines 47 to column 5 line 41).

But, Roz does not expressly disclose having modification means for modifying the ratio of the duration of the load period (TB) to the duration of the succeeding off-load period (TE) as a function of the item of comparison information (VI).

Arakawa et al. teach modifying duty ratio in defining power source for saving power consumption (column 37 line 26 to column 38 line 44), which would have obviously suited for the data carrier of Roz in the event of defining power source by comparator means.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate changing duty ratio based on defined power source taught by Arakawa et al. into the data carrier of Roz, in order to save power consumption.

Regarding claim 7, Roz and Arakawa et al. teach an integrated circuit of a data carrier for contactless communication with a base station by means of an electromagnetic field generated by the base station as explained in response to claim 1 above.

Regarding claims 2 and 8, Roz and Arakawa et al. teach the limitations of claims 1 and 7. Roz and Arakawa et al. teach wherein the modification means (19) are designed to increase the ratio of the duration of the load period (TB) to the duration of the succeeding off-load period (TE) if the item of comparison information (VI) characterizes an item of energy information (EI, IRI) that has been detected that exceeds the preset item of energy information (in case of using battery power source instead of accumulated power source after comparison in Roz, obviously higher battery power source provides a longer duty ratio in teaching of Arakawa et al. for longer operation time).

Regarding claims 3 and 9, Roz and Arakawa et al. teach the limitations of claims 1 and 7. Roz and Arakawa et al. teach wherein the modification means (19) are designed for the stepless modification of the ratio of the duration of the load period (TB) to the duration of the succeeding off-load period (TE) (duty ratio change is obviously stepless since load period and off-load period are adjacent).

Regarding claims 4 and 10, Roz and Arakawa et al. teach the limitations of claims 1 and 7. Roz and Arakawa et al. teach wherein the modulation means are designed to modulate the electromagnetic field (HF) with a subcarrier signal (HTS), the sum of the duration of the load period (TB) and the duration of the off-load period (TE) corresponding to the length of one cycle of the subcarrier signal (HTS) (definition for duty cycle).

Regarding claims 5 and 11, Roz and Arakawa et al. teach the limitations of claims 1 and 7. Roz and Arakawa et al. teach wherein, to detect the energy content of the antenna signal (ASD), the detection means are designed to determine the coil voltage (US) arising between the first and second coil terminals (column 4 lines 26-44, detecting and converting signal energy).

Regarding claims 6 and 12, Roz and Arakawa et al. teach the limitations of claims 1 and 7. Roz and Arakawa et al. teach wherein, to detect the energy content of the antenna signal (ASD), the detecting means are designed to determine a bleed current (IR) through a regulator stage (column 4 lines 26-33).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZHIYU LU whose telephone number is (571)272-2837. The examiner can normally be reached on Weekdays: 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Zhiyu Lu
Examiner
Art Unit 2618

/Zhiyu Lu/
Examiner, Art Unit 2618
August 5, 2009